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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,142	01/16/2001	Julie Broadus	PB/5-31133A	3424

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EXAMINER

GUNTER, DAVID R

ART UNIT	PAPER NUMBER
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1634

DATE MAILED: 08/19/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/761,142

Applicant(s)

BROADUS ET AL.

Examiner

David R. Gunter

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-7 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 and 3, drawn to a method of identifying a compound that interacts with a protein essential for *Drosophila* larval viability, classified in class 436, subclass 543.
- II. Claims 2 and 4-7, drawn to a method of killing or inhibiting the growth or viability of an insect comprising applying a compound identified by the method of Claim 1, classified in class 424, subclass 405.

1. Groups I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Group I recites methods for identifying compounds that interact with *Drosophila* proteins. Group II recites methods of using the compounds identified by the methods of Group I. Groups I and II are substantially different because they include different modes of operation, different functions, and different effects. The mode of operation of Group I includes multiple method steps which are not present in Group II including exposing *Drosophila* proteins to potential inhibitors, assaying the ability of the potential inhibitors to interact with and inhibit *Drosophila* proteins, and identifying those compounds with the desired properties. The mode of operation of Group II includes only the method steps of applying a known inhibitor of larval proteins to an insect.

The function of Group I is to assay inhibitors of *Drosophila* proteins with the desired effect of identifying an effective inhibitor. The function of Group II is to inhibit *Drosophila* proteins with the desired effect of killing or inhibiting the growth of an insect. Because of the differences in the modes of operation, functions, and effects, Group I is determined to be unrelated to Group II. Restriction is therefore deemed proper.

Restriction Requirement Applicable to All Groups

2. Each group detailed above reads on patentably distinct groups drawn to multiple SEQ ID Numbers. Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121, and are thus subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141.

Similarly, the polypeptide sequences in the instant application are patentably distinct because they are unrelated due to their differences in sequence, structure, and function.

Furthermore, nucleotide sequences encoding proteins are structurally and functionally distinct chemical compounds from the amino acid sequences they encode and so are unrelated to the protein. The nucleotide and the protein encoded are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121.

3. The applicant is required to select one of the two claim groups outlined above for prosecution on its merits. The applicant is also required to select one sequence for prosecution on its merits. The applicant may select either a nucleotide sequence (even numbered sequences

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of SEQ ID NOS: 14-360) or a polypeptide sequence (odd numbered sequences of SEQ ID NOS: 15-361).

4. The applicant should be aware that selection of a single SEQ ID NO: represents a response to a restriction requirement, not an election of species.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R. Gunter whose telephone number is (703) 308-1701.

The examiner can normally be reached on 9:00 - 5:00 M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on (703) 308-1152. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9212 for regular communications and (703) 308-8724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0198.



David R. Gunter, DVM, PhD
August 14, 2002



STEPHANIE W. ZITOMER
PRIMARY EXAMINER